# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE YEAR ENDED AUGUST 31, 2016

The following comments are intended to provide a review and analysis of the results of operations, financial condition and cash flows of Opsens Inc. for the fourth quarter and year ended August 31, 2016 in comparison with the corresponding period ended August 31, 2015. In this Management's Discussion and Analysis ("MD&A"), "Opsens", "the Company", "we", "us" and "our" mean Opsens Inc. and its subsidiary. This discussion should be read and interpreted in conjunction with the information contained in our annual consolidated financial statements for the years ended August 31, 2016 and 2015, which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. This document was prepared on November 15, 2016. All amounts are in Canadian dollars unless otherwise indicated.

This MD&A contains forward-looking statements with respect to the Company. These forward-looking statements, by their nature, require the Company to make certain assumptions and necessarily involve known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied in these forward-looking statements. Forward-looking statements are not guarantees of performance. These forward-looking statements, including financial outlooks, may involve, but are not limited to, comments with respect to the Company's business or financial objectives, its strategies or future actions, its targets, expectations for financial condition or outlook for operations and future contingent payments. Words such as "may", "will", "would", "could", "expect", "believe", "plan", "anticipate", "intend", "estimate", "continue", or the negative or comparable terminology, as well as terms usually used in the future and conditional, are intended to identify forward-looking statements.

Information contained in forward-looking statements is based upon certain material assumptions that were applied in drawing a conclusion or making a forecast or projection, including management's perceptions of historical trends, current conditions and expected future developments, as well as other considerations that are believed to be appropriate in the circumstances. The Company considers these assumptions to be reasonable based on information currently available to it, but cautions the reader that these assumptions regarding future events, many of which are beyond its control, may ultimately prove to be incorrect since they are subject to risks and uncertainties that affect the Company and its business. The forward-looking information set forth therein reflects the Company's expectations as at November 15, 2016 and is subject to change after such date. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, other than as required by law.

## OVERVIEW

Opsens focuses mainly on the measure of Fractional Flow Reserve ("FFR") in interventional cardiology. Opsens offers an advanced optical-based pressure guidewire (OptoWire) that aims at improving the clinical outcome of patients with coronary artery disease. Opsens is also involved in industrial activities. The Company develops, manufactures and installs innovative fibre optic sensing solutions for critical applications such as the monitoring of oil wells and other demanding industrial applications.

**In the interventional cardiology field,** during fiscal 2015, Opsens initiated a limited market release of its OptoWire and OptoMonitor. OptoWire provides cardiologists with a guidewire that offers optimal performance to navigate in coronary arteries and cross blockages with ease, while measuring intracoronary blood pressure. This procedure is called measurement of FFR. According to management and industry sources(1), the FFR market was estimated at approximately US$300 million in 2014 and should exceed US$1 billion annually in the medium term.

During fiscal 2015, Opsens received approval to commercialize the OptoWire I and OptoMonitor in the U.S., Europe, Japan and Canada. These combined markets represent approximately 85% of the total market worldwide for FFR products.



(1) Opsens FFR Market Calculations based on **R. Scott Huennekens, "Volcano's CEO Hosts NASDAQ Analyst Day"** ***TRANSCRIPT*** **p.5** ***(2013-03-7)***, JOHN T. DAHLDORF, "Volcano's Annual Report 2012" and St. Jude Medical 2015 – Investors Conference , February 6, 2015.

On March 16, 2016, Opsens announced receipt of the 510(k) clearance from the U.S. Food and Drug Administration (FDA) for the OptoWire II. This major regulatory milestone allows the Company to commercialize its optical guidewire in the U.S., the largest market in the world for these types of products and expanded regulatory clearance for the OptoWire II to the U.S. from previous clearances in Europe and Japan. On June 22, 2016, the Company announced the receipt of Health Canada's approval to sell the OptoWire II in Canada.

The OptoWire II continues to draw positive comments from cardiology experts around the world. For example, an article from the «*Circulation Journal*» highlighted the performance of the OptoWire. More specifically, the article highlighted the fact that traditional guidewires showed an inevitable drift of the measure, despite major efforts to minimize it. It is also said that the occurrence of drift is the most annoying problem that can occur during a procedure in a patient because it is often unnoticed before the wire is pulled back to the guiding catheter at the end of the procedure, and if it is present, it may invalidate the measurement. In the article, it is mentioned that in their laboratories, they used approximately 100 OptoWire in the past year and they have not observed any drift in any of the OptoWire up to now.

Subsequent to approvals received to commercialize the OptoWire II, the number of orders have increased. In addition, many account conversions in Canada, in Europe and in Japan have materialized recently. Opsens also recently began its limited market release in the U.S. These recent developments enable Opsens to compete in the growing FFR market.

In Canada, Opsens has been executing its limited market release with its direct sales force following the successful completion of a clinical trials on 60 patients. The objectives of the study were to evaluate the ease of use, functionality and security of Opsens' OptoWire and OptoMonitor in patients with ischemic coronary artery disease who were referred for diagnostic angiography.

Opsens expanded its sales channels during the year ended August 31, 2016. Opsens is currently present, with its sales channels, in the U.S., in more than 20 countries, in Europe, in Middle East, in Canada and in Japan. To support revenue growth with increased production capacity, Opsens recently moved its medical devices business into a new location in Quebec City (Canada).

**In the industrial sector**, Opsens' technology, expertise and products can serve several markets including aerospace, geotechnical, infrastructures, oil and gas, mining, laboratories and others. For example, for the monitoring of the integrity of structures ("SHM" for Structural Health Monitoring), qualitative and non-continuous methods have long been used to assess the structures and their ability to perform their function. In the past 10 to 15 years, SHM technologies have emerged, creating new exciting fields within the different branches of engineering. SHM is widely applied to various types of infrastructures and represents solid growth opportunities considering that many countries are entering periods of pent up demand for the construction of various infrastructures ranging from bridges to skyscrapers.

As for the oil and gas market, Opsens, through a distributor, provides fiber optic sensor systems that provide reliable real-time pressure and temperature measurements at the bottom of the wells. This information is critical during operations such as Steam Assisted Gravity Drainage ("SAGD"), a process that recovers bitumen from oil sands.

Opsens' broad portfolio of products and technologies can be adapted to measure various parameters in the most harsh conditions and provide significant advantages in terms of production optimization and reduced risk to the environment and health.

Opsens holds 10 patents and 2 pending patents to protect its medical and industrial businesses.

**FFR MARKET OPPORTUNITY**

For the FFR market, Opsens has developed the OptoWire and OptoMonitor, instruments that assess the significance of arterial narrowing (stenosis) resulting from coronary heart disease. Coronary artery disease is a leading cause of death in the developed world and the cost related to the management and treatment of this disease is a significant burden to society. In recent years, the prevalence of coronary heart disease has increased at a rapid pace. According to the American Heart Association ("AHA"), the number of Americans who undergo surgery or cardiovascular operations

or procedures has increased to about 7.6 million patients in 2010. Based on health data compiled from over 190 countries, heart disease remains the No. 1 global cause of death with 17.3 million deaths annually based on a report from the AHA "Heart Disease and Stroke Statistics – 2015 Update". That number is expected to rise to more than 23.6 million by 2030.

The benefits of FFR were demonstrated in various clinical studies such as FAME I and FAME II published respectively in 2009 and 2012 in the New England Journal of Medicine. The FAME I study showed that FFR-guided treatment rather than standard angiography alone led to a reduction in mortality, myocardial infarction, readmission for percutaneous coronary intervention and coronary bypass by about 30% after a year. In 2011, the American College of Cardiology Foundation and the AHA established a class IIA recommendation for the use of FFR during angiography, meaning that the proposed procedure or treatment is beneficial, useful and effective. These developments have contributed to the growth of the market. According to management and industry sources' estimates, the global FFR market reached approximately US$300 million in 2014. Management estimates a potential market of approximately US$1 billion in the medium term.

**INDUSTRIAL MARKET OPPORTUNITY**

**Structural Health Monitoring** market: the opportunities in this market are related principally to strain, load and displacement measurements. The applications are found in geotechnical, civil engineering, energy, aerospace and O&G sectors. Monitoring of civil engineering structures accounts for a large proportion of this market. Only in Europe, there is more than 5 billion square meters of dams and bridges. In the U.S. alone, there are 67,000 unmonitored bridges with an anticipated cost to repair or replace of $76 billion. New industrial versions of the strain sensor like the extensometer and load cell are the main flagship products for these applications.

**Pressure Monitoring Solution** market: the opportunities in this market are principally related to absolute and differential pressure measurements. The measure of the pressure is found in many industrial applications of the energy, geotechnical, oil and gas and aerospace sectors. New industrial versions of the pressure sensor and the recent addition of a differential pressure sensor are the main flagship products for these applications.

**Traditional Niche Applications** market: include niche applications in which Opsens is currently involved like the electro explosive device (EED) application. It also includes applications such as SAGD in Western Canada and laboratories applications (special projects and custom products).

**BUSINESS STRATEGY**

Opsens' growth strategy is to become a key player in the interventional cardiology market by focussing on the FFR procedure where its products and technologies have competitive advantages. The Company also aims to capitalize on its technologies and products in industrial markets.

**The Company's FFR growth strategy will be executed by:**

- Gaining market shares in the fast-growing FFR market. In fiscal 2015, for the first time, Opsens has generated revenues from its FFR offering in the limited market release phase. In fiscal 2016, Opsens expanded its sales activities in several markets, which translated in solid revenue growth. Management believes that FFR is used in over 15% of PCI, but industry analysts suggest that up to 45% of PCI could advantageously be combined with FFR[(2)]. Management is pursuing a comprehensive market development strategy that highlights the features and distinctive capabilities of the OptoWire and exceed marketing requirements to gain market share from competitors and contribute to the expansion of the FFR market. Initially, marketing efforts are focused on the Japanese, U.S., European and Canadian markets.

(2) D. STARKS, "St Jude Medical 2013 Investor Conference" p.105 (2013-02-01); R. Scott Huennekens, "Volcano NASDAQ Analyst Day" POWERPOINT PRESENTATION p.44 (2013-03-07).

(3) Per 60601-2-34 ed3

- Investing in innovation to enhance the existing applications of the Company's technology. The Company's commitment to innovation has been a major driving force behind its success. Opsens is constantly working to improve its intellectual property portfolio and customer value proposition. In the FFR market, OptoWire is designed to provide:

    - Improved measurement reliability and fidelity from OptoWire's no drift[(3)] sensing technology, which is essential to the decision-making process of cardiologists; competing FFR sensing technologies have higher drift levels;
    - Improved connectivity, as OptoWire's connection and measurement accuracy is unaffected by blood contamination and the guidewire can be reconnected easily without compromising measurement accuracy;
    - Improved mechanical performance from key design attributes and product specifications such as torquability and steerability.

- Developing new applications for the Company's medical technology. Opsens plans to leverage its technologies and knowledge in the medical devices field to expand into new markets and increase clinical applications. As the Company pursues opportunities in these new markets, it plans to develop new FFR products and explore product development and marketing partnerships with other leading companies in the sector.

- Expanding and investing in FFR-focused sales force and distribution channels.

    - **Distribution agreements:** Opsens has signed distribution agreements in more than twenty countries in Europe and Asia. These agreements enable Opsens to expand its market penetration worldwide. Although the distribution agreements in place cover the most important potential markets, Opsens expects to sign additional distribution agreements during fiscal year 2017.
    - **Sales force:** Opsens plans on expanding its sales force through hiring additional sales personnel for FFR product commercialization. Sales force expansion will aim to increase Opsens' marketing and sales market penetration in the United States and in Canada.

**The Company's growth strategy in the Industrial sector will be achieved by:**

- Investing in innovation to enhance applications for the Company's technologies. The Company's industrial line of fiber optic sensors offers unique advantages over traditional sensors in many industries. For example traditional sensors need to be shielded and grounded for their safe operation in aircrafts and spaceships. The use of composite materials in the newly developed versions of these flying structures have seriously reduced the natural shielding and grounding capacity provided by the older metallic version of these structures. The Company's fiber optic strain and pressure sensors received attention from major players in the aerospace industry because they do not require any shielding or grounding and also because of their ease of deployment.

  In the oil and gas upstream applications using thermal recovery methods like SAGD, the capacity to control bottom hole pressure and temperature helps improving the steam/oil ratio and to reduce operating and pumping costs. Integration of the corporation OPP-W fiber optic pressure and temperature sensor in thermal recovery methods allows operators, production and reservoir engineers to monitor in real time, over a large area, pressure and temperature at the bottom of the wells. They can manage efficiently the heavy oil production reservoirs.

## NON-IFRS FINANCIAL MEASURE - EBITDAO

The Company quarterly reviews net loss and Earnings Before Interest, Taxes, Depreciation, Amortization and Stock-based compensation costs ("EBITDAO"). EBITDAO has no normalized sense prescribed by IFRS. It is not very probable that this measure is comparable with measures of the same type presented by other issuers. EBITDAO is defined by the Company as the addition of net loss, current income tax expense, depreciation and amortization, impairment of assets, financial expenses (revenues), change in fair value of embedded derivative and stock-based compensation costs. The Company uses EBITDAO for the purposes of evaluating its historical and prospective financial performance. This measure also helps the Company to plan and forecast for future periods as well as to make operational and strategic decisions. The Company believes that providing this information to investors, in addition to IFRS measures, allows them to see the Company's results through the eyes of management, and to better understand its historical and future financial performance.

**Reconciliation of EBITDAO to net loss**

| (In thousands of Canadian dollars) | **Year Ended August 31, 2016** | **Year Ended August 31, 2015** | **Year Ended August 31, 2014** |
|---|---|---|---|
| | **$** | **$** | **$** |
| Net loss for the year | (9,282) | (2,884) | (3,099) |
| Current income tax expense | - | 340 | - |
| Financial expenses (revenues) | 57 | (1) | 114 |
| Change in fair value of embedded derivative | 732 | 73 | 102 |
| Depreciation of property, plant and equipment | 549 | 385 | 346 |
| Amortization of intangible assets | 73 | 62 | 48 |
| Impairment of assets | - | 796 | - |
| EBITDA | (7,871) | (1,229) | (2,489) |
| Stock-based compensation costs | 451 | 317 | 236 |
| **EBITDAO** | (7,420) | (912) | (2,253) |

The negative variance of EBITDAO for fiscal 2016 when compared with last year is mainly explained by the absence of non-recurring revenues of $3,457,500 from distribution rights and licensing recorded in 2015. The negative variance of EBITDAO is also explained by lower gross margin percentage due to ramp-up of FFR production and by higher administrative, marketing and research and development expenses as explained further below. Other non-recurring expenses such as the allowances for obsolete inventories and for doubtful accounts recorded in the industrial sector negatively impacted EBITDAO.

## SELECTED CONSOLIDATED FINANCIAL DATA

| (In thousands of Canadian dollars, except for information per share) | Year Ended August 31, 2016 | Year Ended August 31, 2015 | Year Ended August 31, 2014 |
|---|---|---|---|
| | $ | $ | $ |
| **Revenues** | 9,601 | 8,665 | 6,788 |
| Cost of sales | 7,970 | 3,921 | 4,399 |
| **Gross margin** | 1,631 | 4,744 | 2,389 |
| Gross margin percentage | 17% | 55% | 35% |
| Administrative expenses | 3,685 | 2,616 | 2,398 |
| Sales and marketing expenses | 3,694 | 1,501 | 1,131 |
| R&D expenses | 2,744 | 2,303 | 1,743 |
| Financial expenses (revenues) | 57 | (1) | 114 |
| Change in fair value of embedded derivative | 733 | 73 | 102 |
| Impairment of assets | - | 796 | - |
| | 10,913 | 7,288 | 5,488 |
| **Loss before income taxes** | (9,282) | (2,544) | (3,099) |
| Current income tax expense | - | 340 | - |
| **Net loss and comprehensive loss** | (9,282) | (2,884) | (3,099) |
| **Net loss per share - Basic** | (0.14) | (0.05) | (0.06) |
| **Net loss per share - Diluted** | (0.14) | (0.05) | (0.06) |

### Revenues

The Company reported revenues of $9,601,000 for the year ended August 31, 2016, compared with revenues of $8,665,000 a year earlier, an increase of $936,000 or 11%.

Revenues in the medical sector totalled $6,429,000 for the year ended August 31, 2016 compared with revenues of $5,035,000 for the same period in 2015. The increase is explained by higher FFR revenues. FFR revenues totalled $5,242,000 for the year ended August 31, 2016, an increase of $4,715,000 over the $527,000 reported for the same period last year. The increase is also explained by higher other medical revenues of $136,000.

The increase in revenue was partly offset by the recognition during the year ended August 31, 2015 of non-recurring revenues of $3,457,500 related to a milestone payment of $1,115,500 (US$1,000,000) received from its Japanese distributor upon obtaining Shonin approval, deferred revenues amounting to $2,002,000 (US$2,000,000) (“non-recurring revenues”) recognized in the statement of loss and comprehensive loss when the Company received the CE mark approval in Europe and by an adjustment on revenues of $340,000 ($US300,000) to recognize additional revenues from the distribution agreement.

Revenues in the industrial sector totalled $3,172,000 for the year ended August 31, 2016 compared with revenues of $3,630,000 for the same period in 2015. The decrease in revenues is explained by a non-recurring order worth more than $1 million for fiber optic sensor systems for mining operations in South America that was completed during the second quarter of fiscal 2015. This negative impact was offset by an increase in revenues in the oil and gas activities of $281,000 when compared with last year.

Given that a proportion of the Company's revenues is generated in U.S., Euro and British pounds dollars, fluctuations in the exchange rate affect revenues and net loss. For the year ended August 31, 2016, the average exchange rate was higher than the previous year, which affected sales positively by $551,000.

Market acceptance of FFR and for industrial fiber optic sensors is increasing in the Company’s potential markets. However, some sectors, such as oil and gas, are experiencing challenging economic conditions. To address this

situation, Opsens downsized and reviewed its business model. Consequently, a partnership was announced during fiscal 2015 with a third party for the installation of its products for the oil and gas market in Western Canada. On September 22, 2016, the Company announced a partnership with Precise Downhole Services Ltd. ("Precise") for the commercialization of its product line dedicated to the Canadian oil and gas market. As part of the agreement, Opsens appoints Precise as exclusive distributors for the OPP-W sensor product line in the Canadian territory. For the periods ended August 31, 2016 and 2015, pricing fluctuations did not have a significant impact on revenues. During the year ended August 31, 2015, Opsens began the limited market release phase of its FFR products in Europe and in Japan. During the quarter ended August 31, 2016, the Company initiated the limited market release in the U.S. Management expects that the proportion of revenues generated by FFR will increase in upcoming quarters.

As of August 31, 2016, the backlog of orders amounted to $1,295,000 ($1,131,000 as at August 31, 2015). Despite a slowdown of capital expenditures by major oil and gas producers, significant efforts are being made to increase the backlog and expand the customer base. In addition, the Company will benefit from increased revenues in the medical field resulting from its regulatory clearances in the U.S., Europe, Japan and Canada.

**Gross margin**

Information and analysis in this section do not take into consideration revenues from distribution rights (nil and $3,457,500 for the years ended August 31, 2016 and 2015, respectively).

Gross margin was $1,631,000 for the year ended August 31, 2016 compared with $1,287,000 for the same period last year. The gross margin percentage decreased from 25% for the year ended August 31, 2015 to 17% for the year ended August 31, 2016. The increase in gross margin is explained by higher revenues from FFR products. Despite the increase in gross margin, the gross margin percentage for the year ended August 31, 2016 was affected by higher production losses due to the arrival of a high number of new employees that needed to be trained and other ramp up costs. In addition, gross margin percentage was also impacted by costs incurred by Opsens for the relocation of its activities into a new facility. Following the relocation of its medical activities, the Company had to interrupt most of the production activities for approximately half of the third quarter. Also, the Company assumed a high proportion of unallocated production overhead costs due to lower level of production than expected. During the year ended August 31, 2016, the Company had to seek regulatory approval for the facility from various geographies in order to be allowed to manufacture and ship FFR products. Finally, the Company recognized an allowance for obsolete inventory of $457,000 related to its activities in the oil and gas.

**Administrative expenses**

Administrative expenses were $3,684,000 and $2,616,000, respectively, for the year ended August 31, 2016 and 2015. The increase is explained by a higher allowance for doubtful account related to a client in the oil and gas sector and by higher rental fees arising from the long-term lease signed by the Company to relocate its medical activities.

**Sales and marketing expenses**

Sales and marketing expenses totalled $3,694,000 for the year ended August 31, 2016, an increase of $2,193,000 over the $1,501,000 reported during the same period in 2015. The increase is largely explained by higher headcount, commissions, publicity, tradeshows, travelling and subcontractor expenses when compared with last year due to the expansion of Opsens' sales channel for its FFR products.

**Research and development expenses**

Research and development expenses totalled $2,744,000 for the year ended August 31, 2016, an increase of 441,000$ over the $2,303,000 reported during the same period in 2015. The variation is explained by higher headcount for our FFR activities, partly offset by lower supplies and subcontractors expenses.

**Financial expenses (revenues)**

Financial expenses reached $57,000 for the year ended August 31, 2016 compared with financial revenues of $1,000 for the same period last year. The increase in financial expenses during fiscal 2016 is explained by lower interest income of $43,000 related to lower short-term investments, less favorable exchange rate resulting in a negative impact of $20,000 compared to last year and by an increase in interest on long-term debt of $12,000.

**Change in fair value of embedded derivative**

The change in fair value of embedded derivative comes from the variance of the fair market value of the conversion option component of the convertible debenture. The convertible debenture contains a cash settlement feature, which under IAS 32, "Financial Instruments: Presentation", is accounted for as a compound instrument with a debt component and a separate embedded derivative representing the conversion option. Both the debt and embedded derivative components of this compound financial instrument are measured at fair value on initial recognition. The debt component is subsequently accounted for at amortized cost using the effective interest rate method. The embedded derivative is subsequently measured at fair value at each reporting date with gains and losses in fair value recognized through profit or loss. During the year, an expense of $733,000 ($73,000 for the year ended August 31, 2015) was recorded in the consolidated statements of loss and comprehensive loss.

**Current income tax expense**

During the year ended August 31, 2015, an adjustment on revenues and income tax expense of $340,000 (US$300,000) was made to recognize additional revenues from the Japanese distribution agreement and withholding taxes paid by the Company.

**Net loss**

As a result of the foregoing, net loss for the year ended August 31, 2016 was $9,282,000 compared with $2,884,000 for the year ended August 31, 2015.

**CONSOLIDATED STATEMENT OF FINANCIAL POSITION DATA**

| (In thousands of Canadian dollars) | **As at August 31, 2016** | **As at August 31, 2015** | **As at August 31, 2014** |
|---|---|---|---|
| | **$** | **$** | **$** |
| Current assets | 12,570 | 11,077 | 14,613 |
| Total assets | 16,861 | 12,763 | 16,789 |
| Current liabilities | 3,067 | 2,584 | 4,428 |
| Long-term liabilities | 6,482 | 4,286 | 4,152 |
| Shareholders' equity | 7,312 | 5,893 | 8,209 |

Total assets as at August 31, 2016 were $16,861,000 compared with $12,763,000 as at August 31, 2015. The increase is mainly related to higher property, plant and equipment of $2,515,000 because of acquisitions of equipment and investments in leasehold improvements arising from the relocation into the new facility. The increase in total assets is also explained by higher trade and other receivables of $1,420,000 and higher inventories of $1,219,000, a result of the increase in the FFR activities. This was partly offset by lower cash and cash equivalents of $1,301,000.

Current liabilities totalled $3,067,000 as at August 31, 2016 compared with $2,584,000 as at August 31, 2015. The increase is explained by higher accounts payable and accrued liabilities related to the increase of the production of FFR products.

Long-term liabilities totalled $6,482,000 as at August 31, 2016 compared with $4,286,000 last year, an increase of $2,196,000. The increase is explained by new loans amounting to $1,410,000 contracted during the year and by higher deferred lease inducements of $880,000 related to an amount of $900,000 received from a landlord. These amounts were used to finance the relocation costs into the new facility.

## SUMMARY OF CONSOLIDATED QUARTERLY RESULTS

The summary below presents the periods in which Opsens published unaudited interim financial statements.

| (Unaudited, in thousands of Canadian dollars, except for information per share) | **Three-month period ended August 31, 2016** | **Three-month period ended May 31, 2016** | **Three-month period ended February 29, 2016** | **Three-month period ended November 30, 2015** |
|---|---|---|---|---|
| | **$** | **$** | **$** | **$** |
| Revenues | 3,024 | 2,125 | 2,741 | 1,711 |
| Net loss for the period | (3,025) | (3,076) | (1,523) | (1,658) |
| Net loss per share – Basic | (0.04) | (0.05) | (0.02) | (0.03) |
| Net loss per share – Diluted | (0.04) | (0.05) | (0.02) | (0.03) |

| (Unaudited, in thousands of Canadian dollars, except for information per share) | **Three-month period ended August 31, 2015** | **Three-month period ended May 31, 2015** | **Three-month period ended February 28, 2015** | **Three-month period ended November 30, 2014** |
|---|---|---|---|---|
| | **$** | **$** | **$** | **$** |
| Revenues | 1,110 | 831 | 2,287 | 4,437 |
| Net earnings (loss) for the period | (1,811) | (1,355) | (880) | 1,162 |
| Net earnings (loss) per share – Basic | (0.03) | (0.02) | (0.01) | 0.02 |
| Net earnings (loss) per share – Diluted | (0.03) | (0.02) | (0.01) | 0.02 |

Historically, the Company's revenues and net earnings (net loss) results has experienced minimal seasonality.

## LIQUIDITY AND CAPITAL RESOURCES

On May 27, 2016, the Company entered into a loan agreement of $836,000, net of transaction costs of $9,000, with Investissement Québec. This loan bears interest at prime rate plus 0.25%, is payable in monthly instalments of $18,750, and will be maturing in May 2020. This loan is secured by a movable hypothec on the Company's assets. Under this loan agreement, the Company is subject to certain covenants with respect to maintaining certain financial ratios, which were met as of the date of this MD&A.

On May 16, 2016, the Company completed a non-brokered private placement offering for aggregate gross proceeds of $4,999,050. In connection with the offering, the Company issued a total of 4,761,000 units at a price of $1.05 per unit. Each unit consists of one common share in the capital stock of Opsens and one-half of one common share purchase warrant, with each whole common share purchase warrant entitling the holder thereof to purchase one common share at a price of $1.55 until November 16, 2017.

Expenses of the offering include professional fees and miscellaneous fees for total fees of $102,563.

On May 20, 2016, the Company received an amount $894,000 from the landlord in accordance with the long-term lease signed by the Company to relocate its medical activities. This amount is presented in the balance sheet under the caption “Deferred lease inducements”.

On April 18, 2016, the Company entered into a loan agreement amounting to $497,500, net of transaction costs of $2,500, with Desjardins. This loan bears interest at prime rate plus 2.0%, is payable in monthly instalments of $10,417, calculated over an amortization period of forty-eight (48) months and will be maturing in April 2017. This loan is secured by a movable hypothec on the Company’s assets. Under this loan agreement, the Company is subject to certain covenants with respect to maintaining certain financial ratios, which were met as of the date of this MD&A.

Under an agreement entered into with Canada Economic Development (“CED”), the Company may receive a refundable contribution of a maximum amount $200,000, non-interest bearing, to cover expenses related to the commercialization of its OptoWire product for the FFR market. This contribution is paid out based on presentation by the Company of invoices related to specific expenses since May 22, 2015. On April 1, 2016, the Company received an amount of $65,000 of which $28,000 was recognized against administrative and sales and marketing expenses.

On December 22, 2015, the Company completed a public offering for aggregate gross proceeds of $5,000,000. In connection with the offering, the Company issued a total of 5,681,819 units at a price of $0.88 per unit. Each unit consists of one common share in the capital stock of Opsens and one-half of one common share purchase warrant, with each whole common share purchase warrant entitling the holder thereof to purchase one common share at a price of $1.20 until June 22, 2017.

Expenses of the offering include underwriting fees of $276,202 and other professional fees and miscellaneous fees of $323,713 for total fees of $599,915.

The Company also issued 313,886 broker warrants as additional compensation, each warrant entitling the holder to purchase one common share of the Corporation at a price of $0.88 until June 22, 2017.

Concurrently with the public offering, the Company completed a non-brokered private placement offering of 184,400 units at a price of $0.88 per unit for aggregate gross proceeds of $162,272. Each unit comprises the same terms and conditions than the units issued under the public offering. Expenses related to the private placement amount to $10,083.

On April 15, 2014, the Company announced that it had entered into an agreement with Abiomed in connection with its miniature optical pressure sensor technology for applications in circulatory assist devices. The Company has granted Abiomed an exclusive worldwide license to integrate its miniature pressure sensor in connection with Abiomed’s circulatory assist devices. Under the agreement, Abiomed is expected to pay Opsens an aggregate amount of US$6 million. Of that amount, US$1,500,000 ($1,647,150) was paid upon closing of the deal, while the balance will be disbursed based on the achievement of certain milestones, such as the meeting of certain performance requirements, the filing of regulatory application, the obtaining of regulatory approval and the transfer of manufacturing to Abiomed.

On February 18, 2014, the Company completed a public offering for aggregate gross proceeds of $8,505,104. In connection with the offering, the Company issued a total of 5,340,220 units at a price of $0.75 per unit and 6,164,300 common shares at a price of $0.73 per common share. Each unit consists of one common share in the capital stock of Opsens and one-half of one common share purchase warrant, with each whole common share purchase warrant entitling the holder thereof to purchase one common share at a price of $1.05 until February 18, 2016.

Expenses of the offering include underwriting fees of $595,357 and other professional fees and miscellaneous fees of $373,991 for total fees of $969,348.

The Company also issued 805,316 broker warrants as additional compensation, each warrant entitling the holder to purchase one common share at a price of $0.73 until February 18, 2016.

On November 19, 2012, the Company announced the granting of distribution and other rights for OptoWire and OptoMonitor. Under the terms of the agreement, the Company received:

- US$3,000,000 for the distribution rights for Japan, Korea and Taiwan, which includes:

    a. US$2,000,000 ($2,002,000) at signing;

    b. US$1,000,000 ($1,115,500) with the regulatory approval in Japan;

- US$2,000,000 ($2,002,000) in a form of a subordinated secured convertible debenture, at signing.

The convertible debenture bears interest at a rate of 2.0% per annum, payable at maturity, which is November 19, 2017. At the holder's option, the convertible debenture may be converted into common shares of the Company at any time up to the maturity date, at a conversion price representing the market price of the shares. However, the conversion price is subject to a minimum of $0.50 and a maximum of $0.75 per common share (the "conversion price").

The convertible debenture is also convertible at the Company's option at the conversion price if the volume-weighted average closing price per common share for the twenty trading days immediately preceding the fifth trading day before such conversion date is at least $1.20 and if a minimum of 50,000 common shares have traded on the TSX Venture Exchange during each of the twenty trading days taken into account in the calculation of the conversion price.

To secure the repayment of the convertible debenture, a movable hypothec on certain equipment has been given. As at August 31, 2016, the net book value of property, plant and equipment pledged as collateral was nil ($2,000 as at August 31, 2015). This hypothec will rank second to certain long-term loans of the Company.

As noted above, the convertible debenture contains a conversion option that will result in an obligation to deliver a fixed amount of equity in exchange of a variable amount of convertible debenture when translated in the functional currency of the Company. Consequently, under IAS 32, "Financial Instruments: Presentation", the convertible debenture is accounted for as a compound instrument with a debt component and a separate embedded derivative representing the conversion option. Both the debt and embedded derivative components of this compound financial instrument are measured at fair value on initial recognition. The debt component is subsequently accounted for at amortized cost using the effective interest rate method. The embedded derivative is subsequently measured at fair value at each reporting date with gains and losses in fair value recognized through profit or loss.

The Company has an authorized line of credit for a maximum amount of $200,000, $50,000 of which is available at all times and does not take into consideration the margining. When using the line of credit in an amount varying from $50,000 and $100,000, the available credit is limited to an amount that is equal to 75% of Canadian accounts receivable and 65% of foreign accounts receivable plus 50% of inventories of raw materials and finished goods. If the amount used exceeds $100,000, the credit available is limited to an amount equal to 75% of Canadian accounts receivable and 90% of insured foreign accounts receivable plus 50% of inventories of raw materials and finished goods. This line of credit bears interest at the financial institution's prime rate plus 2% and is repayable on a weekly basis by $5,000 tranches. It is secured by a first-rank movable hypothec for an amount of $750,000 on the universality of receivables and inventories.

As of August 31, 2016, the Company had cash and cash equivalents of $5,903,000 compared with $7,204,000 as of August 31, 2015. Of this amount as of August 31, 2016, $5,448,000 was invested in highly liquid, safe investments. As of August 31, 2016, Opsens had a working capital of $9,503,000, compared with $8,493,000 as of August 31, 2015.

Based on the cash and cash equivalents position, Opsens has the financial resources necessary to maintain short-term operations, honour its commitments and support its anticipated growth and development activities. From a medium-term perspective, Opsens may need to raise additional financing by issuing equity securities and/or debt. From a long-term perspective, there is uncertainty about obtaining additional financing, given the risks and uncertainties identified in the *Risks and Uncertainties* section of the annual MD&A. Changes in cash and cash equivalents position will largely depend on the rate of revenue growth in upcoming quarters.

## SUMMARY OF CASH FLOWS

| (In thousands of Canadian dollars) | Year Ended August 31, 2016 | Year Ended August 31, 2015 |
|---|---|---|
| | $ | $ |
| Operating activities | (9,523) | (3,474) |
| Investing activities | (3,120) | (539) |
| Financing activities | 11,311 | 65 |
| Effect of foreign exchange rate changes on cash and cash equivalent | 31 | 531 |
| **Net change in cash and cash equivalents** | (1,301) | (3,417) |

### Operating activities

Cash flows used by our operating activities for the year ended August 31, 2016 were $9,523,000 compared with $3,474,000 for the same period last year. The increase in the cash flows used by our operating activities is mainly explained by a lower EBITDAO as explained.

### Investing activities

For the year ended August 31, 2016, cash flows used by our investing activities reached $3,120,000 and were used for acquisition of property, plant and equipment for an amount of $3,088,000 and of intangible assets for an amount of $127,000. This was partly offset by interest income received of $95,000. Acquisitions of property, plant and equipment were made primarily for the relocation in the new facility.

For the year ended August 31, 2015, cash flows used by our investing activities reached $539,000 and were used for acquisition of property, plant and equipment for an amount of $585,000 and of intangible assets for an amount of $137,000. This was partly offset by interest income received of $140,000 and by proceeds from disposal of property, plant and equipment of $43,000. Acquisitions of property, plant and equipment were made primarily for our FFR activities.

### Financing activities

For the year ended August 31, 2016, cash flows generated by our financing activities were $11,311,000. The net proceeds from the issuance of shares and units of $10,251,000 and the increase in our long-term debt of $1,399,000 were partly offset by the $338,000 payment on the long-term debt.

For the year ended August 31, 2015, cash flows generated by our financing activities reached $65,000. The proceeds from the issuance of shares of $251,000 were partly offset by the $186,000 payment on the long-term debt.

## COMMITMENTS

### Leases

The Company leases offices in Québec under operating leases expiring on April 30, 2018 and September 30, 2025. These agreements are renewable for an additional five-year period.

Future payments for the leases, totalling $3,135,000, required in each of the forthcoming years are as follows:

| | $ |
|---|---|
| 2017 | 471,000 |
| 2018 | 416,000 |
| 2019 | 297,000 |
| 2020 | 303,000 |
| 2021 | 310,000 |
| Thereafter | 1,338,000 |

**INFORMATION BY REPORTABLE SEGMENTS**

*Sector's Information*

In order to strengthen its medical identity to develop its full potential in the FFR market, the Company reorganized, on September 1, 2015, its corporate structure. Following the reorganization, the Company is now organized into two segments: Medical and Industrial.

*Medical segment*: In this segment, Opsens focuses mainly on the measure of FFR in interventional cardiology.

*Industrial segment*: In this segment, Opsens' develops, manufactures and installs innovative fiber optic sensing solutions for critical applications such as the monitoring of oil wells and other demanding industrial applications.

The principal factors employed in the identification of the two segments reflected in this note include the Company's organizational structure, the nature of the reporting lines to the President and Chief Executive Officer and the structure of internal reporting documentation such as management accounts and budgets.

In accordance with IFRS 8, *Operating Segments*, the Company has restated the corresponding information for the year ended August 31, 2015 to reflect the corporate reorganization with the exception of the information on segment assets and liabilities because the information was not available and the cost to develop it would have been excessive.

The same accounting policies are used for both reportable segments. Operations are carried out in the normal course of operations and are measured at the exchange amount, which approximates prevailing prices in the markets.

| | **Years ended August 31,** | | | | | |
|---|---|---|---|---|---|---|
| | | | **2016** | | | 2015 |
| | **Medical** | **Industrial** | **Total** | Medical | Industrial | Total |
| | **$** | **$** | **$** | $ | $ | $ |
| External sales | **6,429,256** | **3,171,561** | **9,600,817** | 5,034,767 | 3,629,963 | 8,664,730 |
| Internal sales | **-** | **413,982** | **413,982** | - | - | - |
| Depreciation of property, plant and equipment | **443,355** | **105,875** | **549,230** | 214,780 | 170,051 | 384,831 |
| Amortization of intangible assets | **64,543** | **8,224** | **72,767** | 48,352 | 13,748 | 62,100 |
| Financial expenses (revenues) | **(167,106)** | **223,970** | **56,864** | (163,257) | 162,691 | (566) |
| Current income tax expense | **-** | **-** | **-** | 340,000 | - | 340,000 |
| Net earnings (loss) | **(7,247,523)** | **(2,031,912)** | **(9,279,435)** | 708,560 | (2,796,188) | (2,087,628) |
| Acquisition of property, plant and equipment | **2,934,675** | **131,924** | **3,066,599** | 553,062 | 71,577 | 624,639 |
| Additions to intangible assets | **108,264** | **54,376** | **162,640** | 137,036 | 23,383 | 160,419 |
| Segment assets | **14,281,597** | **2,579,879** | **16,861,476** | N/A | N/A | N/A |
| Segment liabilities | **8,973,258** | **575,795** | **9,549,053** | N/A | N/A | N/A |

The Company's net loss per reportable segments reconciles to its consolidated financial statements as follows:

| | Years ended August 31, | |
|---|---|---|
| | **2016** | 2015 |
| | **$** | $ |
| Net loss per reportable segments | **(9,279,435)** | (2,087,628) |
| Elimination of inter-segment profits | **(2,234)** | - |
| Impairment charge on property, plant and equipment | **-** | (119,663) |
| Impairment charge on goodwill | **-** | (676,574) |
| Net loss and comprehensive loss | **(9,281,669)** | (2,883,865) |

*Geographic sector's information*

| | Years ended August 31, | |
|---|---|---|
| | **2016** | 2015 |
| | **$** | $ |
| Revenue per geographic sector | | |
| Japan | **3,521,669** | 3,978,097 |
| Canada | **2,207,299** | 1,350,228 |
| United States | **1,506,971** | 870,179 |
| Chile | **6,396** | 1,169,182 |
| Other* | **2,358,482** | 1,297,044 |
| | **9,600,817** | 8,664,730 |

* Comprised of revenues generated in countries for which amounts are individually not significant.

Revenues are attributed to the geographic sector based on the clients' location. Capital assets, which include property, plant and equipment and intangible assets, are all located in Canada.

During the year ended August 31, 2016, revenues from one client represented individually more than 10% of the total revenues of the Company, i.e. approximately 37% (medical's reportable segment).

During the year ended August 31, 2015, revenues from two clients represented individually more than 10% of the total revenues of the Company, i.e. approximately 40% (medical's reportable segment) and 13% (industrial's reportable segment).

*Medical segment*

For the year ended August 31, 2016, revenues from medical segment were $6,429,000 compared with $5,035,000 for the year ended August 31, 2015, an increase of $1,394,000. The increase is explained by higher FFR revenues of $4,714,000 and by higher other medical revenues of $137,000. This was partially offset by the non-recurring revenues recognized during the year ended August 31, 2015 of $3,457,500 and by an adjustment on revenues of $340,000 (US$300,000) to recognize additional revenues from the distribution agreement.

Gross margin was $1,042,000 for the year ended August 31, 2016 compared with $4,035,000 for the year ended August 31, 2015, a decrease of $2,993,000. The gross margin percentage for the year ended August 31, 2015, without taking into consideration the non-recurring revenues, was 37% compared to 16% for year ended August 31, 2016. The decrease is explained by higher production losses due to the arrival of a high number of new employees that needed to be trained and other ramp up costs. In addition, gross margin percentage was also impacted by costs incurred by Opsens

for the relocation of its activities into a new facility. Following the relocation of its medical activities, the Company had to interrupt most of the production activities for approximately half of the third quarter. Also, the Company assume a high proportion of unallocated production overhead due to lower level of production than expected. In addition, the Company had to seek regulatory approvals for the facility from various geographies in order to be allowed to manufacture and ship FFR products.

Net loss for the medical segment was $7,248,000 for the year ended August 31, 2016 compared with net earnings of $708,000 for the year ended August 31, 2015. The increase in net loss is explained by the non-recurring revenues recorded during the year ended August 31, 2015 and by higher administrative, sales and marketing and research and development expenses as explained previously.

Working capital for the medical segment as at August 31, 2016 was $7,884,000 compared with $7,052,000 as at August 31, 2015. The increase of $832,000 is due to higher accounts receivables of $575,000, by higher inventory of $2,017,000 and by higher prepaid expenses of $165,000. This was partly offset by lower cash and cash equivalents of $1,500,000, by lower tax credit receivable of $135,000 and by a higher current portion of long-term debt of $247,000.

*Industrial segment*

For the year ended August 31, 2016, revenues from industrial segment were $3,172,000 compared with $3,630,000 for the year ended August 31, 2015, a decrease of $458,000. The decrease is explained by a non-recurring order worth more than $1 million for fiber optic sensor systems for mining operations in South America completed in fiscal 2015 partly offset by an increase in revenues in the oil and gas when compared with last year.

Gross margin was $591,000 for the year ended August 31, 2016 compared with $709,000 for the same period in 2015, a decrease of $118,000. Gross margin percentage decrease from 20% for the year ended August 31, 2015 to 19% for the same period in 2016. The decrease in gross margin is due to lower revenues combine with an allowance for obsolete inventory of $457,000 recorded during the year, a consequence of the difficult economic conditions prevailing in Alberta for oil and gas producers.

Net loss for the industrial segment was $2,032,000 for the year ended August 31, 2016 compared to a net loss of $2,796,000 for the year ended August 31, 2015. The decrease in the net loss is explained by lower administrative and sales and marketing expenses reflecting the effectiveness of the Company's implemented cost reduction measures. This is partly offset by a higher allowance for doubtful accounts related to a client in the oil and gas.

Working capital for the industrial segment as at August 31, 2016 was $1,619,000 compared with $1,441,000 as at August 31, 2015. The increase of $178,000 is due to higher cash and cash equivalents of $199,000, by higher accounts receivable of $845,000, by higher tax credit receivable of $150,000 and by lower deferred revenues of $243,000. This is partly offset by a decrease in inventories of $796,000 due to an allowance for obsolete inventory and by higher accounts payable of $434,000 when compared with last year.

**FOURTH QUARTER 2016**

**Revenues**

Revenues totalled $3,025,000 for the quarter ended August 31, 2016 compared to $1,110,000 for the same period last year. The increase in revenues is explained by higher FFR revenues and other medical revenues.

**Gross margin**

Gross margin was ($133,000) for the three-month period ended August 31, 2016 compared to ($105,000) for the same period last year, a decrease of $28,000. Gross margin as a percentage of revenues increased from (9%) for the three-month period ended August 31, 2015 to (4%) for the same period in 2016. The negative gross margin is explained by recognition of an allowance for obsolete inventory of $462,000 as explained previously.

**Administrative expenses**

Administrative expenses were $833,000 and $631,000 for the three-month periods ended August 31, 2016 and 2015, respectively. The increase is explained by higher headcount and professional fees.

**Sales and marketing expenses**

Sales and marketing expenses totalled $1,267,000 for the quarter ended August 31, 2016, an increase of $950,000 over the $317,000 reported for the same period in 2015. The increase is largely explained by higher headcount, commissions, travelling and subcontractor expenses when compared with last year due to the expansion of Opsens' sales channel for its FFR products.

**Research and development expenses**

Research and development expenses totalled $702,000 for the quarter ended August 31, 2016, an increase of $24,000 over the $678,000 reported for the same period in 2015. The increase is explained by higher headcount for FFR activities. This was partly offset by lower supplies and subcontractors expenses than last year because of the manufacturing in fiscal 2015 of OptoWire II for the verification and validation phase.

**Financial expenses**

Financial expenses totalled $2,000 and $20,000 for the three-month periods ended August 31, 2016 and 2015, respectively. The decrease in financial expenses is explained by a favorable exchange rate resulting in a positive impact of $28,000. This was offset by higher interest expense on long-term debt of $9,000.

**Change in fair value of embedded derivative**

The change in fair value of embedded derivative comes from the variance of the fair market value of the conversion option component for the convertible debenture. During the fourth quarter, an amount of $88,000 ($60,000 for the three-month period ended August 31, 2015) was recorded as a loss in the consolidated statement of loss.

**Net loss**

As a result of the foregoing, net loss for the quarter ended August 31, 2016 was $3,025,000 or 0.04 cent a share compared with a net loss of $1,811,000 or 0.03 cent a share for the same quarter in 2015.

**INFORMATION ON SHARE CAPITAL**

For the year ended August 31, 2016, the Company granted to some employees, Directors and consultants a total of 2,154,750 stock options with an average exercise price of $0.95, cancelled 93,750 stock options with an exercise price of $0.79 and 574,250 stock options with an average exercise price of $0.38 were exercised.

For the year ended August 31, 2015, the Company granted to some employees and Directors a total of 862,000 stock options with an average exercise price of $0.81 and cancelled 620,000 stock options with an average exercise price of $0.29. Also, 17,500 stock options with an average exercise price of $0.81 expired and 854,250 stock options with an average exercise price of $0.27 were exercised.

For the year ended August 31, 2016, the Company issued 5,313,610 warrants with units with an average exercise price of $1.36 and issued 313,886 warrants to brokers with an average exercise price of $0.88. Also, 2,670,110 warrants expired with an average exercise price of $1.05 and 790,316 warrants with an average exercise price of $0.74 were exercised.

For the year ended August 31, 2015, 25,000 warrants with an average exercise price of $0.73 were exercised.

As at November 15, 2016, the following components of shareholders' equity are outstanding:

| | |
|---|---|
| Common shares | 72,995,038 |
| Stock options | 5,198,500 |
| Warrants | 5,582,496 |
| Convertible debenture | 3,520,000 |
| Securities on a fully diluted basis | 87,296,034 |

The number of shares that would be issued upon conversion of the debenture may vary depending on various parameters such as the exchange rate and the conversion price per share. In the table above, the conversion was carried out on the assumption that the exchange rate between the U.S. dollar and the Canadian dollar is 1.32 and the conversion price is equal to $0.75 per share.

No dividend was declared per share for each share class.

**RELATED-PARTY TRANSACTIONS**

In the normal course of its operations, the Company has entered into transactions with related parties.

| | **Years ended August 31,** | |
|---|---|---|
| | **2016** | 2015 |
| | **$** | $ |
| Professional fees paid to a company controlled by a director | **29,248** | 25,459 |

Fees are incurred for the Company's FFR activities.

**FINANCIAL INSTRUMENTS**

**Fair Value**

The fair value of cash and cash equivalents, trade and other receivables and accounts payable and accrued liabilities approximates their carrying value due to their short-term maturities.

The fair value of long-term debt is based on the discounted value of future cash flows under the current financial arrangements at the interest rate the Company expects to currently negotiate for loans with similar terms and conditions and maturity dates. The fair value of long-term debt approximates its carrying value due to the current market rates.

The fair value of the convertible debenture is based on the discounted value of future cash flows under the current financial arrangements at the interest rate the Company expects to currently negotiate for loans with similar terms and conditions and maturity dates. The fair value of the debt component of the convertible debenture approximates $1,905,700 as at August 31, 2016 ($1,693,400 as at August 31, 2015) and is classified at level 2 in the fair value hierarchy.

**Valuation Techniques and Assumptions Applied for the Purposes of Measuring Fair Value**

The Company must maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The Company primarily applies the market approach for recurring fair value measurements. The three input levels used by the Company to measure fair value are the following:

Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 – Quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following table summarizes the fair value hierarchy under which the Company's financial instruments are valued.

| | As at August 31, 2016 | | | |
|---|---|---|---|---|
| | **Total** | **Level 1** | **Level 2** | **Level 3** |
| | **$** | **$** | **$** | **$** |
| **Financial assets (liabilities) measured at fair value:** | | | | |
| Convertible debenture – embedded derivative | **(979,635)** | **-** | **(979,635)** | **-** |

| | As at August 31, 2015 | | | |
|---|---|---|---|---|
| | **Total** | **Level 1** | **Level 2** | **Level 3** |
| | **$** | **$** | **$** | **$** |
| **Financial assets (liabilities) measured at fair value:** | | | | |
| Convertible debenture – embedded derivative | (245,773) | - | (245,773) | - |

The convertible debenture contains an embedded derivative that must be measured at fair value at each reporting date with gains and losses in fair value recognized through profit or loss. One of the most significant assumptions impacting the Company's valuation of this embedded derivative is the implied volatility. The fair value of the convertible debenture was determined using the Black-Scholes pricing model using an implied volatility of 55% (95% in 2015), a discount rate of 0.57% (0.44% in 2015) and an expected life of 1.2 years (2.2 years in 2015). A 1% change in the implied volatility factor would have changed the fair value of the embedded derivative by $9,575 ($1,840 for the year ended August 31, 2015).

**Risk Management**

The main risks arising from the Company's financial instruments are credit risk, liquidity risk, interest rate risk and foreign exchange risk. These risks arise from exposures that occur in the normal course of business and are managed on a consolidated Company basis.

**Credit Risk**

Credit risk is the risk of an unexpected loss if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Company regularly monitors credit risk exposure and takes steps to mitigate the likelihood of this exposure resulting in losses. The Company's exposure to credit risk currently relates to cash and cash equivalents and to trade and other receivables. The Company's credit risk management policies include the authorization to carry out investment transactions with recognized financial institutions with credit ratings of at least A and higher, in either

bonds, money market funds or guaranteed investment certificates. Consequently, the Company manages credit risk by complying with established investment policies.

The credit risk associated with trade and other receivables is generally considered normal as trade receivables consist of a large number of customers spread across diverse geographical areas. Generally, the Company does not require collateral or other security from customers for trade accounts receivable; however, credit is extended following an evaluation of creditworthiness. In addition, the Company performs ongoing credit reviews of all of its customers and establishes an allowance for doubtful accounts when accounts are determined to be at risks and/or uncollectible. Two major customers represented 50% of the Company's total accounts receivable as at August 31, 2016 (33% as at August 31, 2015).

As at August 31, 2016, 56% (4% as at August 31, 2015) of the accounts receivable were of more than 90 days whereas 30% (55% as at August 31, 2015) of those were less than 30 days. The maximum exposure to the risk of credit for accounts receivable corresponded to their book value. As at August 31, 2016, the allowance for doubtful accounts was established at $491,623 ($3,032 as at August 31, 2015).

**Liquidity Risk**

Liquidity risk is the risk that the Company will encounter difficulty in meeting obligations associated with financial liabilities that are settled in cash and/or another financial asset. The Company's approach is to ensure it will have sufficient liquidity to meet operational, capital and regulatory requirements and obligations, under both normal and stressed circumstances. Cash flow projections are prepared and reviewed quarterly by the Board of Directors to ensure a sufficient continuity of funding. The funding strategies used to manage this risk include the Company's access to capital markets for equity and debt securities issues.

The following are the contractual maturities of the financial liabilities (principal and interest, assuming current interest rates) as at August 31, 2016 and August 31, 2015:

| **August 31, 2016** | **Carrying amount** | **Cash flows** | **0 to 12 months** | **12 to 24 months** | **After 24 months** |
|---|---|---|---|---|---|
| | **$** | **$** | **$** | **$** | **$** |
| Accounts payable and accrued liabilities | **2,041,873** | **2,041,873** | **2,041,873** | **-** | **-** |
| Long-term debt | **1,784,654** | **1,930,582** | **530,651** | **502,285** | **897,646** |
| Convertible debenture | **3,792,839** | **2,898,533** | **-** | **2,898,533** | **-** |
| Total | **7,619,366** | **6,870,988** | **2,572,524** | **3,400,818** | **897,646** |

| **August 31, 2015** | **Carrying amount** | **Cash flows** | **0 to 12 months** | **12 to 24 months** | **After 24 months** |
|---|---|---|---|---|---|
| | $ | $ | $ | $ | $ |
| Accounts payable and accrued liabilities | 1,657,962 | 1,657,962 | 1,657,962 | - | - |
| Long-term debt | 695,088 | 862,821 | 244,458 | 180,646 | 437,717 |
| Convertible debenture | 2,998,702 | 2,907,594 | - | - | 2,907,594 |
| Total | 5,351,752 | 5,428,377 | 1,902,420 | 180,646 | 3,345,311 |

**Interest Rate Risk**

The Company's exposure to interest rate risk is summarized as follows:

| | |
|---|---|
| Cash and cash equivalents | Fixed interest rates |
| Trade and other receivables | Non-interest bearing |
| Accounts payable and accrued liabilities | Non-interest bearing |
| Long-term debt | Non-interest bearing, fixed and variable interest rates |
| Convertible debenture | Fixed interest rates |

**Interest Rate Sensitivity Analysis**

Interest rate risk exists when interest rate fluctuations modify the cash flows or the fair value of the Company's investments and embedded derivative. The Company owns investments with fixed interest rates. As at August 31, 2016, the Company was holding more than 92% (93% as at August 31, 2015) of its cash and cash equivalents in all-time redeemable term deposits.

All else being equal, a hypothetical 1% interest rate increase would have had an unfavourable impact of $2,487 on net loss and comprehensive loss for the year ended August 31, 2016 (unfavourable impact of $1,100 for the year ended August 31, 2015). A hypothetical 1% interest rate decrease would have had a favourable impact of $3,670 on net loss and comprehensive loss for the year ended August 31, 2016 (favourable impact of $1,300 for the year ended August 31, 2015).

*Financial expenses (revenues)*

| | **Years ended August 31,** | |
|---|---|---|
| | **2016** | 2015 |
| | **$** | $ |
| Interest and bank charges | **57,298** | 60,868 |
| Interest on long-term debt | **44,967** | 32,665 |
| Interest and accreted interest on convertible debenture | **69,629** | 83,225 |
| Loss (gain) on foreign currency translation | **(3,988)** | (23,746) |
| Interest income | **(111,042)** | (153,678) |
| | **56,864** | (566) |

**Concentration Risk**

Concentration risk exists when investments are made with multiple entities that share similar characteristics or when a large investment is made with a single entity. As at August 31, 2016 and 2015, the Company was holding 100% of its cash equivalents portfolio in all-time redeemable term deposits with financial institutions with high creditworthiness.

**Foreign Exchange Risk**

The Company realizes certain sales and purchases and certain supplies and professional services in US dollars, Euros and British pound. Therefore, it is exposed to foreign currency fluctuations. At this time, the Company does not actively manage this risk.

*Foreign Currency Sensitivity Analysis*

For the year ended August 31, 2016, if the Canadian dollar had strengthened 10% against the US dollar with all other variables held constant, net loss and comprehensive loss would have been $260,000 lower ($11,000 higher for the year ended August 31, 2015). Conversely, if the Canadian dollar had weakened 10% against the US dollar with all other variables held constant, net loss and comprehensive loss would have been $260,000 higher for the year ended August 31, 2016 ($11,000 lower for the year ended August 31, 2015).

For the year ended August 31, 2016, if the Canadian dollar had strengthened 10% against the Euros with all other variables held constant, net loss and comprehensive loss would have been $159,000 higher ($20,000 higher for the year ended August 31, 2015). Conversely, if the Canadian dollar had weakened 10% against the Euros with all other variables held constant, net loss and comprehensive loss would have been $159,000 lower for the year ended August 31, 2016 ($20,000 lower for the year ended August 31, 2015).

For the year ended August 31, 2016, if the Canadian dollar had strengthened 10% against the British pound with all other variables held constant, net loss and comprehensive loss would have been $42,000 higher (nil for the year ended August 31, 2015). Conversely, if the Canadian dollar had weakened 10% against the British pound with all other variables held constant, net loss and comprehensive loss would have been $42,000 lower for the year ended August 31, 2016 (nil for the year ended August 31, 2015).

As at August 31, 2016 and August 31, 2015, the risk to which the Company was exposed is established as follows:

| | **As at August 31, 2016** | As at August 31, 2015 |
|---|---|---|
| | **$** | $ |
| Cash and cash equivalents (US$125,202; US$2,097,017 as at August 31, 2015) | **163,903** | 2,759,045 |
| Cash and cash equivalents (Euro 22,450; nil as at August 31, 2015) | **32,842** | - |
| Trade and other receivables (US$440,847; US$182,630 as at August 31, 2015) | **578,410** | 240,286 |
| Trade and other receivables (Euro 205,129; Euro 53 625 as at August 31, 2015) | **300,083** | 79,167 |
| Trade and other receivables (British pound 85,745; nil as at August 31, 2015) | **147,679** | - |
| Accounts payable and accrued liabilities (US$317,632; US$289,251 as at August 31, 2015) | **(416,288)** | (380,567) |
| Convertible debenture (US$2,144,864; US$2,092,368 as at August 31, 2015) | **(2,813,204)** | (2,752,929) |
| Embedded derivatives (US$746,900; US$186,800 as at August 31, 2015) | **(979,635)** | (245,773) |
| Total | **(2,986,210)** | (300,771) |

## CAPITAL MANAGEMENT

The Company's objective in managing capital, primarily composed of shareholders' equity, long-term debt and the convertible debenture, is to ensure sufficient liquidity to fund R&D activities, general and administrative expenses, sales and marketing expenses, long-term debt, working capital and capital expenditures.

In the past, the Company has had access to liquidity through non-dilutive sources, including the sale of non-core assets, long-term debt, investment tax credits and government assistance, interest income and public equity offerings.

As at August 31, 2016, the Company's working capital amounted to $9,502,625 ($8,492,636 as at August 31, 2015), including cash and cash equivalents of $5,903,040 ($7,203,612 as at August 31, 2015). The accumulated deficit at the same date was $30,539,014 ($21,257,345 as at August 31, 2015). Based on the Company's assessment, which takes into account current cash and cash equivalents, as well as its strategic plan and corresponding budgets and forecasts, the Company believes that it has sufficient liquidity and financial resources to fund planned expenditures and other working capital needs for at least, but not limited to, the 12-month period following the consolidated statements of financial position date of August 31, 2016.

The Company believes that its current liquid assets are sufficient to finance its activities in the short-term.

The Company manages the capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. Capital management objectives, policies and procedures have remained unchanged since the last fiscal year.

For the years ended August 31, 2016 and 2015, the Company has not been in default under any of its obligations regarding the long-term debt.

## CAPACITY TO PRODUCE RESULTS

As discussed in the section “LIQUIDITY AND CAPITAL RESOURCES”, the Company has the required financial resources for its short-term operations, to fulfill its commitments, to support its growth plan and for the development of its activities. On a mid-term perspective, it is possible that additional financing, through the issuance of shares or debt financing or any other means of financing, might be required.

During the next year, the increase in the activity level should require additional investment in working capital of approximately $3,100,000. Additional investments of approximately $2,600,000 will also be required for the acquisition of property, plant and equipment and to finance the anticipated negative EBITDAO.

From the human resources’ perspective, there are no vacancies in the major executive positions within the Company. However, additional technical and production personnel as well as sales and marketing personnel will be required to support the expected growth. Taking into account the employment market in Canada, Opsens is confident in its capacity to recruit qualified human resources in a timely fashion.

Regarding the strategy on corporate executive remuneration, it is oriented towards creation of long-term value for the shareholders. Several corporate executives hold an important share and share-purchase option position, with rights to be acquired over a four-year period in order to align shareholders’ interest with corporate executives’ interest. This long-term vision stimulates innovation and the development of recurrent revenues.

## NEW ACCOUNTING STANDARDS

There are no IFRSs or International Financial Reporting Interpretations Committee ("IFRIC") that are effective for the first time in 2016 that would be expected to have a material impact on the Company.

### Not yet adopted

*IFRS 9, Financial Instruments*

In July 2014, the IASB issued the final version of IFRS 9, *Financial Instruments*. The new standard will replace IAS 39, *Financial instruments: recognition and measurement*. The final amendments made in the new version include guidance for the classification and measurement of financial assets and a third measurement category for financial assets, fair value through other comprehensive income. The standard also contains a new expected loss impairment model for debt instruments measured at amortized cost or fair value through other comprehensive income, lease receivables, contract assets and certain written loan commitments and financial guarantee contracts. The standard is effective for annual periods beginning on or after January 1, 2018 and must be applied retrospectively with some

exceptions. Early adoption is permitted. Restatement of prior periods in relation to the classification and measurement, including impairment, is not required. The Company has not yet assessed the impact of this new standard.

*IFRS 15, Revenue from Contracts with Customers*

In May 2014, the IASB issued IFRS 15, *Revenue from contracts with customers*. IFRS 15 replaces all previous revenue recognition standards, including IAS 18, *Revenue*, and related interpretations such as IFRIC 13, *Customer loyalty programmes*. The standard sets out the requirements for recognizing revenue. Specifically, the new standard introduces a comprehensive framework with the general principle being that an entity recognizes revenue to depict the transfer of promised goods and services in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard introduces more prescriptive guidance than was included in previous standards and may result in changes in classification and disclosure in addition to changes in the timing of recognition for certain types of revenues. On July 22, 2015, the IASB has confirmed a one-year deferral of the effective date of IFRS 15 to January 1, 2018.

In April 2016, the IASB issued clarifications to IFRS 15, *Revenue from contracts with customers*. These clarifications provide additional clarity on revenue recognition related to identifying performance obligations, application guidance on principal versus agent and licenses of intellectual property. The Company has not yet assessed the impact of this new standard.

*IFRS 16, Lease*

On January 13, 2016, the IASB released IFRS 16, *Leases*, which replace IAS 17, *Leases*, and the related interpretations on leases such as IFRIC 4, *Determining whether an arrangement contains a lease*, SIC 15, *Operating leases – Incentives* and SIC 27, *Evaluating the substance of transactions in the legal form of a lease*. This new standard specifies how to recognize, measure, present and disclose leases. It also provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases unless lease term is 12 months or less or the underlying asset has a small value. Accounting for the lessor remain substantially unchanged. The standard is effective for periods beginning on or after January 1, 2019, with earlier application permitted for companies that also apply IFRS 15, *Revenue from Contracts with Customers*. The Company has not yet assessed the impact of this new standard.

*IAS 7, Statement of cash flows*

On January 29, 2016, the IASB published amendments to IAS 7, *Statements of cash flows*. The amendments are intended to clarify IAS 7 to improve information provided to users of financial statements about an entity's financing activities. They are effective for annual periods beginning on or after January 1, 2017, with earlier application being permitted. The Company has not yet assessed the impact of this new standard.

## RISK FACTORS AND UNCERTAINTIES

The Company operates in an industry that contains various risks and uncertainties. The risks and uncertainties listed below are not the only ones to which the Company is subject. Additional risks and uncertainties not presently known by the Company, or which the Company deems to be currently insignificant, may impede the Company's performance. The materialization of one of the following risks could harm the Company's activities and have significant negative impacts on its financial situation and its operating results. In that case, the Company's stock price could be affected.

***In the FFR market, the Company is dependent on the success of the OptoWire, its guidewire measuring FFR and cannot be certain that it will achieve the broad acceptance necessary to develop a profitable business.*** Expected future revenues are primarily derived from sales of the OptoWire. The OptoWire is designed to provide cardiologists with a pressure guidewire to navigate coronary arteries and cross blockages with ease, while also measuring intra-coronary blood pressure. The Company expects that sales of its FFR products will account for a majority of its revenues for the foreseeable future, however it is difficult to predict the penetration and future growth rate or size of the market for FFR technology. The expansion of the FFR market depends on a number of factors, such as:

- physicians accepting the benefits of the use of FFR in conjunction with angiography;
- physicians experience with FFR products either used alone or jointly used in a single percutaneous coronary intervention, or PCI;
- the availability of training necessary for proficient use of FFR products, as well as willingness by physicians to participate in such training;
- the additional procedure time required for use of FFR compared to the perceived benefits;
- the perceived risks generally associated with the use of the Company's products and procedures, especially its new products and procedures;
- the placement of the Company's products in treatment guidelines published by leading medical organizations;
- the availability of alternative treatments or procedures that are perceived to be or are more effective, safer, easier to use or less costly;
- hospitals' willingness, and having sufficient budgets, to purchase the Company's FFR products;
- the size and growth rate of the PCI market in the major geographies in which the Company operates;
- the availability of adequate reimbursement; and
- the success of the Company's marketing efforts and publicity regarding FFR technology.

Even if FFR technology gains wide market acceptance, the Company's FFR products may not adequately address market requirements and may not continue to gain market acceptance among physicians, healthcare payors and the medical community due to factors such as:

- the lack of perceived benefit from information related to pressure characteristics of blood around blockages available to the physician;
- the actual and perceived ease of use of the Company's FFR products;
- the quality of the measurements provided by the Company's FFR products;
- the cost, performance, benefits and reliability of the Company's FFR products relative to competing products and services; and
- the extent and timing of technological advances.

If FFR technology generally, or the Company's FFR products specifically, do not gain wide market acceptance, the Company may not be able to achieve its anticipated growth, revenues or profitability and its results of operations would suffer.

***The risks inherent in the Company's international operations may adversely impact its revenues, results of operations and financial condition.*** The Company anticipates that it will derive a significant portion of its revenues from operations in Japan, the United States and Europe. As the Company expands internationally, it will need to retain and train its distributors, hire, train and retain qualified personnel for its direct sales efforts and train other personnel in countries where language, cultural or regulatory impediments may exist. The Company cannot ensure that distributors, physicians, regulators or other government agencies outside Canada will accept its products, services and business practices. Current or future trade, social and environmental regulations or political issues could restrict the supply of resources used in production or increase its costs. Compliance with such regulations is costly. Any failure to comply with applicable legal and regulatory obligations could impact the Company in a variety of ways that include, but are not limited to, significant criminal, civil and administrative penalties, including imprisonment of individuals, fines and penalties, denial of export privileges, seizure of shipments and restrictions on certain business activities. Failure to comply with applicable legal and regulatory obligations could result in the disruption of the Company's manufacturing, shipping and sales activities. The Company's international sales operations expose it and its representatives, agents and distributors to risks inherent in operating in foreign jurisdictions, including:

- the Company's ability to obtain, and the costs associated with obtaining export licenses and other required export or import licenses or approvals;
- changes in duties and tariffs, taxes, trade restrictions, license obligations and other non-tariff barriers to trade;
- burdens of complying with a wide variety of foreign laws and regulations related to healthcare products;
- costs of localizing product and service offerings for foreign markets;
- business practices favoring local companies;

- longer payment cycles and difficulties collecting receivables through foreign legal systems;
- difficulties in enforcing or defending agreements and intellectual property rights;
- differing local product preferences, including as a result of differing reimbursement practices;
- fluctuations in foreign currency exchange rates and their impact on the Company's operating results; and
- changes in foreign political or economic conditions.

The Company cannot ensure that one or more of these factors will not harm the Company. Inability to expand the Company's international operations would adversely impact its revenues, results of operations and financial condition.

***If the third-party distributors that the Company will rely on to market and sell its products are not successful, the Company may be unable to increase or maintain its level of revenues.*** A portion of its revenue will be generated by third-party distributors, especially in international markets. If these distributors cease or limit operations or experience a disruption of their business operations, or are not successful in selling the Company's products, it may be unable to increase or maintain its level of revenues, and any such developments could negatively affect its international sales strategy. Over the long term, the Company intends to grow its business internationally, and to do so it will need to attract additional distributors to expand the territories in which the Company does not directly sell its products. The Company's distributors may not commit the necessary resources to market and sell its products. If current or future distributors do not continue to distribute the Company's products or do not perform adequately or if the Company is unable to locate distributors in particular geographic areas, it may not realize revenue growth internationally.

***The Company may require significant additional capital to pursue its growth strategy, and its failure to raise capital when needed could prevent the Company from executing its growth strategy.*** The Company believes that its existing cash and cash equivalents will be sufficient to meet its anticipated cash needs for at least the next 12 months. However, the Company may need to obtain additional financing to pursue its strategy, to respond to new competitive pressures or to act on opportunities to acquire or invest in complementary businesses, products or technologies. The timing and amount of the Company's working capital and capital expenditure requirements may vary significantly depending on numerous factors, including:

- market acceptance of its products;
- the revenues generated by its products;
- the need to adapt to changing technologies and technical requirements, and the costs related thereto;
- the costs associated with expanding its manufacturing, marketing, sales and distribution efforts;
- the existence and timing of opportunities for expansion, including acquisitions and strategic transactions; and
- costs and fees associated with defending existing or potential litigation.

***If the Company fails to properly manage its anticipated growth, the Company could suffer.*** Rapid growth of the Company is likely to place a significant strain on its managerial, operational and financial resources and systems. To execute the Company's anticipated growth successfully, it must attract and retain qualified personnel and manage and train them effectively. The Company anticipates hiring additional distributors and personnel to assist in the commercialization of its current products and in the development of future products. The Company will be dependent on its personnel and third parties to effectively market and sell its products to an increasing number of customers. It will also depend on its personnel to develop and manufacture in anticipated increased volumes its existing products, as well as new products and product enhancements. Further, the Company anticipated growth will place additional strain on its suppliers resulting in increased need for it to carefully monitor for quality assurance. Any failure by the Company to manage its growth effectively could have an adverse effect on its ability to achieve its development and commercialization goals.

***If the Company is unable to protect its intellectual property effectively, its financial condition and results of operations could be adversely affected.*** Patents and other proprietary rights are essential to the Company and its ability to compete effectively with other companies is dependent upon the proprietary nature of its technologies. The Company also relies upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop, maintain and strengthen its competitive position. The Company seeks to protect these, in part, through confidentiality agreements with certain employees, consultants and other parties. The Company pursues a policy of generally obtaining patent protection in both Canada and in key foreign countries for patentable subject matter in its proprietary

devices and also attempt to review third-party patents and patent applications to the extent publicly available to develop an effective patent strategy, avoid infringement of third-party patents, and monitor the patent claims of others.

The Company currently owns numerous Canadian and foreign patents and has patent applications pending. The Company cannot be certain that any pending or future patent applications will result in issued patents, that any current or future patents issued will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide a competitive advantage to it or prevent competitors from entering markets which the Company currently serves. In addition, the Company may have to take legal action in the future to protect its trade secrets or know-how or to defend itself against claimed infringement of the rights of others. Any legal action of that type could be costly and time consuming to the Company despite insurance policies owned by the Company and it cannot be certain of the outcome. The invalidation of key patents or proprietary rights which the Company owns or an unsuccessful outcome in lawsuits to protect its intellectual property could have a material adverse effect on its financial condition and results of operations.

***Pending and future patent litigation could be costly and disruptive to the Company and may have an adverse effect on its financial condition and results of operations.*** The Company operates in an industry that is susceptible to significant patent litigation and, in recent years, it has been common for companies in the medical device field to aggressively challenge the rights of other companies to prevent the marketing of new devices. Companies that obtain patents for products or processes that are necessary for or are useful to the development of its products may bring legal actions against the Company claiming infringement. Defending intellectual property litigation is expensive and complex and outcomes are difficult to predict. Any pending or future patent litigation may result in significant royalty or other payments or injunctions despite insurance policies owned by the Company that can prevent the sale of products and may cause a significant diversion of the efforts of the Company's technical and management personnel. While the Company intends to defend any such lawsuits vigorously, it cannot be certain that it will be successful. In the event that the Company's right to market any of its products is successfully challenged or if the Company fails to obtain a required license or is unable to design around a patent, the Company's financial condition and results of operations could be materially adversely affected.

***Quality problems with the processes and products could harm the Company's reputation for producing high-quality products and diminish its competitive advantage, sales and market share.*** The manufacturing of the FFR products is a highly rigorous and complex process, due in part to strict regulatory requirements. Any failure to manufacture our products in accordance with product specifications could result in increased costs, lost revenues, field corrective actions, customer dissatisfaction or voluntary product recalls, any of which could harm the Company's profitability and commercial reputation. Problems may arise during manufacturing for a variety of reasons, including equipment malfunction, failure to follow specific protocols and procedures and problems with raw materials. Quality is extremely important to us and our customers due to the serious and costly consequences of product failure. Opsens' quality certifications are critical to the marketing success of its products. If the Company's fails to meet these standards, its reputation could me damaged, it could lose customers, and its revenue and results of operations could decline. Aside from specific customer standards, our success depends generally on our ability to manufacture to exact tolerances precision-engineered components, subassemblies, and finished devices from multiple materials. If the components fail to meet these standards or fail to adapt to evolving standards, Opsens' reputation as a manufacturer of high-quality devices will be harmed, its competitive advantage could be damaged, and it could lose customers and market share.

***The loss of any of the Company's sole-source suppliers or an increase in the price of inventory supplied to it could have an adverse effect on the Company's financial condition and results of operations.*** The Company purchases certain supplies used in its manufacturing processes from single sources due to quality considerations, costs or constraints resulting from regulatory requirements. Agreements with certain suppliers are terminable by either party upon short notice and the Company has been advised periodically by some suppliers that in an effort to reduce their potential product liability exposure, they may terminate sales of products to customers that manufacture implantable medical devices, and the Company may not be able to establish additional or replacement suppliers for certain components or materials quickly. In addition, the Company may lose a sole-source supplier due to, among other things, the acquisition of such a supplier by a competitor (which may cause the supplier to stop selling its products to it) or the bankruptcy of such a supplier, which may cause the supplier to cease operations. A reduction or interruption by a sole-source supplier of the supply of materials or key components used in the manufacturing of the Company's

products or an increase in the price of those materials or components could adversely affect the Company's financial condition and results of operations.

***The Company's might encounter challenges relating to the management and operation of its new facility, and the expansion has and will continue to increase its fixed costs, which may have a negative impact on its financial results and condition.*** In June 2015, the Company announced a massive expansion to increase its manufacturing capacity and accommodate its growing number of employees. Therefore, Opsens entered into a leasing agreement for a 30,000 square foot building. There is no guarantee that the Company will be able to successfully operate this facility in an efficient or profitable manner. The Company will also need to transfer its manufacturing processes, technology and know-how to the new facility. If the Company is unable to operate this facility, or successfully transfer its manufacturing processes, technology and know-how in a timely and cost-effective manner, or at all, then it might experience disruption in its operations, which could negatively impact its business and financial results.

***Instability in international markets or foreign currency fluctuations could adversely affect the Company's results of operations.*** The Company's products will be marketed in many countries, with its largest geographic markets being Japan, Europe, and the United States. As a result, the Company's faces currency and other risks associated with its international sales. The Company is exposed to foreign currency exchange rate fluctuations due to transactions denominated primarily in United States dollars and Euros which may potentially reduce the Canadian dollars the Company receives for sales denominated in any of these foreign currencies and/or increase the Canadian dollars the Company reports as expenses in these currencies, thereby affecting its reported consolidated revenues, profit margins and results of operations. Fluctuations between the currencies in which the Company does business will cause foreign currency transaction gains and losses. The Company cannot predict the effects of currency exchange rate fluctuations upon its future operating results because of the number of currencies involved, the variability of currency exposures and the volatility of currency exchange rates.

In addition to foreign currency exchange rate fluctuations, there are a number of additional risks associated with the Company's international operations, including those related to:

- the imposition of or increase in import or export duties, surtaxes, tariffs or customs duties;
- the imposition of import or export quotas or other trade restrictions;
- foreign tax laws and potential increased costs associated with overlapping tax structures;
- compliance with import/export laws;
- longer accounts receivable cycles in certain foreign countries, whether due to cultural, economic or other factors;
- changes in medical reimbursement programs and regulatory requirements in international markets in which the Company operates; and
- economic and political instability in foreign countries, including concerns over excessive levels of sovereign debt and budget deficits in countries where the Company markets its products that could result in an inability to pay or timely pay outstanding payables.

***Modifications to the Company's products may require new regulatory clearances or approvals or may require the Company to recall or cease marketing its products until clearances or approvals are obtained.*** Modifications to the Company's products may require the submission of new regulatory filings. If a modification is implemented to address a safety concern, the Company may also initiate a recall or cease distribution of the affected device. In addition, if the modified devices require the submission of a new regulatory filing and the Company distributes such modified devices without obtaining regulatory clearances or approvals, then the Company may be required to recall or cease distributing the devices. Regulatory bodies can review a manufacturer's decision not to submit a modification and may disagree. Regulatory bodies can also on their own initiatives determine that clearances or approvals are required. The Company may make additional modifications in the future that it believes do not or will not require clearance or approval. If the Company begins manufacture and distribution of the modified devices and regulatory bodies later disagree the Company's determination and require the submission of new regulatory filing for the modifications, the Company may also be required to recall the distributed modified devices and to stop distribution of the modified devices, which could have an adverse effect on its business. If the regulatory bodies do not clear or approve the modified devices, the Company may need to redesign the devices, which could also harm its business. When a device is marketed without a required clearance or approval, the regulatory bodies have the authority to bring an enforcement action, including

injunction, seizure and criminal prosecution. Regulatory bodies consider such additional actions generally when there is a serious risk to public health or safety and the Company's corrective and preventive actions are inadequate to address the regulatory bodies' concerns.

***If the Company or its suppliers fail to comply with regulatory bodies' quality system or ISO quality management systems, manufacturing of its products could be negatively impacted and sales of its products could suffer.*** The Company's manufacturing practices must be in compliance with regulatory bodies' quality system regulation, which governs the facility, methods, controls procedures, and records of the design, manufacture, packaging, labeling, storage, shipping, installation, and servicing its products intended for human use. The Company is also subject to similar state and foreign requirements and licenses, including the current Good Manufacturing Practice (cGMP) for medical devices, MDD-93/42/EEC and the ISO 13485 Quality Management Systems, standard applicable to medical devices. In addition, the Company must engage in regulatory reporting in the case of potential patient safety risks and makes available its manufacturing facility, procedures, and records for periodic inspections and audits by governmental agencies. If the Company fails to comply with these regulations and standards, its operations could be disrupted and its manufacturing interrupted, and it may be subject to enforcement actions if its corrective actions are not adequate to ensure compliance.

***The Company's products may in the future be subject to product recalls or voluntary market withdrawals that could harm its reputation, business and financial results.*** Local and foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture that could affect patient safety. Manufacturers may, under their own initiative, recall a product if any material deficiency in a device is found or suspected. A government-mandated recall or voluntary recall by the Company or one of its distributors could occur as a result of component failures, manufacturing errors, design, labeling defects or other issues. Recalls, which include corrections as well as removals, of any of the Company's products would divert managerial and financial resources and could have an adverse effect on its financial condition, harm its reputation with customers, and reduce its ability to achieve expected revenues.

***The Company is required to comply with medical device reporting, or MDR, requirements and must report certain malfunctions, deaths, and serious injuries associated with its products, which can result in voluntary corrective actions or agency enforcement actions.*** Under MDR regulations, medical device manufacturers are required to submit information to regulatory bodies when they receive a report or become aware that a device has or may have caused or contributed to a death or serious injury or has or may have a malfunction that would likely cause or contribute to death or serious injury if the malfunction were to recur. All manufacturers placing medical devices on the market are legally bound to report any serious or potentially serious incidents involving devices they produce or sell to the competent authority in those jurisdictions the incident occurred. If this were to happen to the Company, the relevant competent authority would file an initial report, and there would then be a further inspection or assessment if there were particular issues. This would be carried out either by the competent authority or it could require that the BSI, as the notified body, carry out the inspection or assessment.

Malfunctions of the Company's products could result in future voluntary corrective actions, such as recalls, including corrections, or customer notifications, or agency action, such as inspection or enforcement actions. If malfunctions do occur, the Company cannot guarantee that it will be able to correct the malfunctions adequately or prevent further malfunctions, in which case we may need to cease manufacture and distribution of the affected devices, initiate voluntary recalls, and redesign the devices; nor can we ensure that regulatory authorities will not take actions against us, such as ordering recalls, imposing fines, or seizing the affected devices. If someone is harmed by a malfunction or by product mishandling, the Company may be subject to product liability claims. Any corrective action, whether voluntary or involuntary, as well as defending ourselves in a lawsuit, will require the dedication of its time and capital, distract management from operating the business, and may harm its reputation and financial results.

***The Company has a limited operating history, and cannot assure you that it achieves and sustains profitability in future periods.*** The Company was incorporated in 2006 and has been profitable, on a full year basis, only in 2010. Net losses for fiscal years ended August 31, 2016 and 2015 were $9,282,000 and $2,884,000, respectively. To the extent that the Company is able to increase revenues, it expects its operating expenses will also increase as the Company will be expanded to meet anticipated growing demand for its products and will devote resources to its sales, marketing and research and development activities. If the Company is unable to reduce its operating expenses, the Company may not

achieve profitability. Additionally, expenses will fluctuate as the Company makes future investments in research and development, selling and marketing and general and administrative activities, including as a result of new product introductions. This will cause the Company to experience variability in its reported earnings and losses in future periods. You should not rely on the Company's operating results for any prior quarterly or annual period as an indication of its future operating performance.

***Dependence upon a limited number of clients.*** Although the Company has numerous clients, a relatively small number of them contribute a significant percentage of the Company's consolidated revenues. For the year ended August 31, 2016, revenues from one client represented individually more than 10% of the total revenues of the Company, i.e. approximately 37%. The Company believes that the degree of dependence will diminish as its sales progress. However, if this client reduces current or expected purchases, this could have unfavourable impacts on the Company's activities, its revenues, its financial position and its operating results.

***The Company faces intense competition and may not be able to keep pace with the rapid technological changes in the medical devices industry.*** The medical device market is intensely competitive and is characterized by extensive research and development and rapid technological change. The Company's future customers will consider many factors when choosing suppliers, including product reliability, clinical outcomes, product availability, inventory consignment, price and product services provided by the manufacturer, and market share can shift as a result of technological innovation and other business factors. Major shifts in industry market share have occurred in connection with product problems, physician advisories and safety alerts, reflecting the importance of product quality in the medical device industry, and any quality problems with the Company's processes, goods and services could harm its reputation for producing high-quality products and erode its competitive advantage, sales and potential market share.

The Company's competitors are larger companies which have significantly greater resources and broader product offerings than the Company, and it anticipates that in the coming years, other technologies or corporations could enter the FFR market. In addition, the Company expects that competition will intensify with the increased use of strategies such as consigned inventory, preferential pricing and bundling of products, and the Company anticipates increasing price competition as a result of managed care, consolidation among healthcare providers, increased competition and declining reimbursement rates. Product introductions or enhancements by competitors which have advanced technology, better features or lower pricing may make the Company's products or proposed products obsolete or less competitive. As a result, the Company will be required to devote continued efforts and financial resources to bring its products under development to market, enhance its existing products and develop new products for the medical marketplace. If the Company fails to develop new products, enhance existing products or compete effectively, the Company's financial condition and results of operations will be adversely affected.

***Failure to innovate may adversely impact the Company's competitive position and may adversely impact its ability to drive price increases for its products and its product revenues.*** The Company's future success will depend upon its ability to innovate and introduce enhancements to its existing products in order to address the changing needs of the marketplace. The Company also relies on product enhancements to attempt to drive price increases for its products in its markets. Frequently, product development programs require assessments to be made of future clinical need and commercial feasibility, which are difficult to predict. Customers may forego purchases of its products and purchase its competitors' products as a result of delays in introduction of its new products and enhancements, failure to choose correctly among technical alternatives or failure to offer innovative products or enhancements at competitive prices and in a timely manner. Any delays in product releases may negatively affect the Company.

***Delays in planned product introductions may adversely affect the Company and negatively impact future revenues.*** The Company may in the future experience delays in various phases of product development and commercial launch, including during research and development, manufacturing, limited release testing, marketing and customer education efforts. Any delays in the Company's product launches may significantly impede its ability to successfully compete in its markets and may reduce its revenues. The Company and its future collaborators may fail to develop or effectively commercialize products covered by its future collaborations if:

- the Company does not achieve its objectives under its collaboration agreements;
- the Company or its collaborators are unable to obtain patent protection for the products or proprietary technologies the Company develops with its collaborations; or

- the Company or its collaborators encounter regulatory hurdles that prevent commercialization of its products.

If the Company or its collaborators are unable to develop or commercialize products, or if conflicts arise with its collaborators, the Company will be delayed or prevented from developing and commercializing products, which will harm the Company and financial results.

***Divestitures of any of the Company's businesses or product lines may materially adversely affect the Company, results of operations and financial condition.*** The Company continues to evaluate the performance of all of its businesses and may sell a business or product line. Any divestitures may result in significant write-offs, including those related to intangible assets, which could have a material adverse effect on the Company's business, results of operations and financial condition. Divestitures could involve additional risks, including difficulties in the separation of operations, services, products and personnel, the diversion of management's attention from other business concerns, the disruption of the Company's business and the potential loss of key employees. The Company may not be successful in managing these or any other significant risks that it encounters in divesting a business or product line.

***If the Company's facilities or systems are damaged or destroyed, it may experience delays that could negatively impact its revenues or have other adverse effects.*** The Company's facilities may be affected by natural or man-made disasters. If one of its facilities were affected by a disaster, the Company would be forced to rely on third-party manufacturers or to shift production to another manufacturing facility. In such an event, the Company would face significant delays in manufacturing which would prevent it from being able to sell its products. In addition, the Company's insurance may not be sufficient to cover all of the potential losses and may not continue to be available to it on acceptable terms, or at all. Furthermore, although its computer and communications systems are protected through physical and software safeguards, they are still vulnerable to fire, storm, flood, power loss, earthquakes, telecommunications failures, physical or software break-ins, software viruses, and similar events, and any failure of these systems to perform for any reason and for any period of time could adversely impact the Company's ability to operate.

***The Company is subject to stringent domestic and foreign medical device regulation and any adverse regulatory action may materially adversely affect its financial condition and business operations.*** The Company's products, development activities and manufacturing processes are subject to extensive and rigorous regulation by numerous government agencies. To varying degrees, each of these agencies monitors and enforces the Company's compliance with laws and regulations governing the development, testing, manufacturing, labelling, marketing and distribution of its medical devices. The process of obtaining marketing approval or clearance from these government agencies for new products, or for enhancements or modifications to existing products, could:

- take a significant amount of time;
- require the expenditure of substantial resources;
- involve rigorous pre-clinical and clinical testing, as well as increased post-market surveillance; and
- involve modifications, repairs or replacements of the Company's products, and result in limitations on the indicated uses of its products.

The Company cannot be certain that it will receive required approval or clearance from government agencies for new products or modifications to existing products on a timely basis. The failure to receive approval or clearance for significant new products or modifications to existing products on a timely basis could have a material adverse effect on the Company's financial condition and results of operations.

Foreign governmental regulations have become increasingly stringent and more common, and the Company may become subject to even more rigorous regulation by foreign governmental authorities in the future. Penalties for a company's noncompliance with foreign governmental regulation could be severe, including revocation or suspension of a company's business license and criminal sanctions. Any domestic or foreign governmental medical device law or regulation imposed in the future may have a material adverse effect on the Company's financial condition and business operations.

***The FFR procedures and the cardiovascular field in general are continually the subject of clinical trials conducted by the Company's competitors or other third parties, the results of which may be unfavorable, or perceived as unfavorable by the market, and could have a material adverse effect on the Company's financial condition and results of operations.*** Unfavorable or inconsistent clinical data from existing or future clinical trials conducted by the Company, by its competitors or by third parties, or the market's perception of this clinical data, may adversely impact its ability to obtain product approvals, the size of the markets in which the Company participates, its position in, and share of, the markets in which the Company participates and the Company's financial condition and results of operations.

***Any defects or malfunctions in the computer hardware or software the Company utilizes in its products could cause severe performance failures in such products, which would harm its reputation and adversely affect its results of operations and financial condition.*** The Company's existing and new products depend and will depend on the continuous, effective and reliable operation of computer hardware and software. Any defect, malfunction or other failing in the computer hardware or software utilized by the Company's products, including products it develops in the future, could result in inaccurate readings, misinterpretations of data, or other performance failures that could render the Company's products unreliable or ineffective and could lead to decreased confidence in its products, damage to its reputation, reduction in its sales and product liability claims, the occurrence of any of which could have a material adverse effect on the Company's results of operations and financial condition. Although the Company updates the computer software utilized in its products on a regular basis, there can be no guarantee that defects do not or will not in the future exist or that unforeseen malfunctions, whether within the Company's control or otherwise, will not occur.

***If the Company fails to obtain or maintain, or experience significant delays in obtaining, regulatory clearances or approvals for its products or product enhancements, the Company's ability to commercially distribute and market its products could suffer.*** The Company's products are subject to rigorous regulation by federal, provincial, state and foreign governmental authorities. The Company's failure to comply with such regulations or to make adequate, timely corrections, could lead to the imposition of injunctions, suspensions or loss of marketing clearances or approvals, product recalls, manufacturing cessation, termination of distribution, product seizures, civil penalties, or some combination of such actions. The process of obtaining regulatory authorizations to market a medical device can be costly and time consuming, and there can be no assurance that such authorizations will be granted on a timely basis, if at all. If regulatory clearance or approvals are received, additional delays may occur related to manufacturing, distribution or product labeling.

***Cost containment pressures and domestic and foreign legislative or administrative reforms resulting in restrictive reimbursement practices of third-party payors or preferences for alternate therapies could decrease the demand for products purchased by the Company's customers, the prices which they are willing to pay for those products and the number of procedures using its devices.*** FFR products will be purchased principally by healthcare providers that typically bill various third-party payors, such as governmental, private insurance plans and managed care plans, for the healthcare services provided to their patients. The ability of customers to obtain appropriate reimbursement for their services and the products they provide from government and third-party payors is critical to the success of medical technology companies. The availability of reimbursement affects which products customers purchase and the prices they are willing to pay. Reimbursement varies from country to country and can significantly impact the acceptance of new technology. After the Company develops a promising new product, it may find limited demand for the product unless reimbursement approval is obtained from private and governmental third-party payors.

Major third-party payors for healthcare provider services continue to work to contain healthcare costs. The introduction of cost containment incentives, combined with closer scrutiny of healthcare expenditures by both private health insurers and employers, has resulted in increased discounts and contractual adjustments to healthcare provider charges for services performed and in the shifting of services between inpatient and outpatient settings. Initiatives to limit the growth of healthcare costs, including price regulation, are also underway in several countries in which the Company will do business. Implementation of healthcare reforms in the United States and in significant overseas markets such as Germany, Japan and other countries may limit the price or the level at which reimbursement is provided for the Company's products and adversely affect both its pricing flexibility and the demand for its products. Healthcare providers may respond to such cost-containment pressures by substituting lower cost products or other therapies for the Company's products.

***Consolidation in the healthcare industry could lead to demands for price concessions or limit or eliminate the Company's ability to sell to certain of its significant market segments.*** The cost of healthcare has risen significantly over the past decade and numerous initiatives and reforms initiated by legislators, regulators and third-party payors to curb these costs have resulted in a consolidation trend in the medical device industry as well as among the Company's future customers, including healthcare providers. This in turn has resulted in greater pricing pressures and limitations on the Company's ability to sell to important market segments, as group purchasing organizations, independent delivery networks and large single accounts. The Company expects that market demand, government regulation, third-party reimbursement policies and societal pressures will continue to change the worldwide healthcare industry, resulting in further business consolidations and alliances which may exert further downward pressure on the prices of its products and adversely impact the Company's financial condition and results of operations.

***The success of the OptoWire depends upon strong relationships with physicians and other healthcare professionals.*** If the Company fails to build working relationships with physicians and other healthcare professionals, many of its products may not be developed and marketed in line with the needs and expectations of the professionals who support its products. The research, development, marketing and sales of many of its new and improved products is dependent upon the Company maintaining working relationships with physicians as well as other healthcare professionals, who are becoming increasingly instrumental in making purchasing decisions for its products. The Company relies on these professionals to provide it with considerable knowledge and experience regarding its products and the marketing and sale of its products. Physicians also assist the Company as researchers, marketing consultants, product consultants, inventors and as public speakers. If the Company is unable to maintain its strong relationships with these professionals and continue to receive their advice and input, the development and marketing and sales of its products could suffer, which could have a material adverse effect on its financial condition and results of operations. The Company's relationships with physicians and other healthcare professionals and other providers that use its products are regulated under various laws. In addition, the Company has in place and is continuously improving its internal business integrity and compliance program and policies. Failure to comply with the United States federal anti kickback law or similar state or foreign law could result in criminal or civil penalties.

**OTHER INFORMATION**

Updated information on the Company can be found on the SEDAR Web site at http://www.sedar.com.

On behalf of management,
Chief Financial Officer and Corporate Secretary

*(s) Thierry Dumas*

November 15, 2016